Department of Fish and Game
Habitat and Restoration Division

Important to Anadromous Fish

Region S.C. USGS Quad Anchorage C6, C7

Anadromous Water Catalog Number of Waterway 247-50-10260-2019-3020 & 3030, 3032,

Name of Waterway TRIB. TO SPRING CREEK ☐ USGS Name ☐ Local Name

☒ Addition ☐ Deletion ☒ Correction ☐ Backup Information

ALSO 247-50-10260-2019 (channel moved) ALSO 3020-4008 + 4008-5009-6008 & 4008-5009-6008

For Office Use

Nomination #	99 339		
Revision Year:	00	Regional Supervisor	4/31 00 Date
Revision to: Atlas ___ Catalog ___ Both X		EQ Weiss	3/22/00
		AWC Project Biologist	Date
Revision Code: D-1 A-2 D-2 C-5		L. Brown	4/19/00
		Drafted	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
COHO	7/12/86		X		☒
COHO	9/15/98		X		☒
COHO	8/7/84		X		☒
COHO	10/99 THRU 3/00		X		☒
					☐

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: ADD STREAM 247-50-10260-2019-3030 PER ATTACHED DATA. CORRECT HYDRO FOR SPRING CREEK (247-50-10260-2019-3020) AS NOTED. ADD STREAM -2019-3032 PER ATTACHED DATA. DELETE STREAM 4008-5009 & 4008-5009-6008. SHORTEN STREAM 10260-2019-3020-4008. ORIGINAL NOMINATION (LIEPITZ 1988) ONLY SUPPORTS ANADROMY TO MARKED LOCATION. CHANNELS ABOVE HAVE YET TO YIELD COHO IN SUBSEQUENT TRAPPING.

Name of Observer (please print): EQ WEISS

Signature: EQ Weiss Date: 3/22/00

Address: ADF&G
333 RASPBERRY RD ANCH. AK.

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes per AS 16.05.870.

Signature of Area Biologist: _____

Revision 3/97

Ed Weiss

9/15/98

MB = 4.66
1270 = 1.55

1 LONE JACK 5 @ Below Settlers Rd

2 TRAPS SET @ PARKS & GLENN "Y" @ 0920

A? DV 62 MM 65 mm
CO 48 MM
~100 YDS ABOVE MAINSTEM
TEMP 3.5 C
SHOCKED ~30 YDS @ STREAM
SMALL SHALLOW
~4" 18" WIDE

COBBLE SUBSTRATE SETTLEMENT
UNDERCUT
OVERHANGING GRASSES.
MIXED SPRUCE HARDWOOD

B = SHOCKED ONE POOL TEMP 4°C
CO 49, 49, 50, 52, 48 55

STRM OVERHANG VEG. MIXED
HARDWOOD / SPRUCE UNDERCUT
BANKS GRAVEL RIFFLES & SAND
SILT POOLS. 8' FT WIDE
C S

C = SHALLOW 4" SILT BOTTOM C TYPE
SAME LOOKS AS OTHERS TEMP 5.5C
1 CO NOT RETRIEVED
CO 51 53
DV 72

MAINSTEM ABOVE C TYPE C SILT MUD
DV 66
UNDERCUT OVERHANG MIXED

D = NONE 5°C C MOD LITTLE GRAVEL

E = @ SPRING TEMP 5°C
CO 72 FAT SILVERY SOUCAGE
SPAWNING.

9/15/98 CONT.

2 TRAPS @ Y

#1 10' UPSTREAM OF CULVERT INLET.
PULLED 1545
Blackfish → 138, 99, 92, 104
Coho → 96, 98, 97, 57
8.5C

P

#2 50' UPSTREAM
Blackfish - 110,

April 27, 1988

Mr. William F. Ballard
Environmental Analyst
Alaska Department of
Transportation
4111 Aviation Avenue
Pouch 6900
Anchorage, Alaska 99502

Dear Mr. Ballard:

The attached table and map displays the survey data for three separate field surveys performed by representatives from the Alaska Department of Fish and Game (ADF&G) and the U.S. Fish and Wildlife Service (USF&WS) during the period of August 1984 through July 1986.

As we have previously indicated to you, the Spring Creek drainage is an extremely important coho salmon rearing area producing a point estimate of about 6,000 juvenile coho per surface acre (Chlupach, 1985).

Sampling trap efforts have occurred both in the defined Spring Creek channel as well as the adjacent wetlands. No trap effort has occurred, however, in the flowing stream channels or wetlands located immediately north of the Alaska Railroad right-of-way (See attached sketch map.).

It should be noted that several of the traps were placed in emergent wetlands with no visible flow and less than two to three inches of standing water. For example, a trap set immediately south of the Parks Highway intersection and soaked for 21 hours hours resulted in a catch of 36 juvenile coho ranging in age from one to three years (See attached sketch map, Trap #2.).

From a regional perspective, it is known that there is an annual escapement in excess of 1000 spawning adults in Wasilla Creek and less than 200 within Spring Creek. Observations made by department biologists reveal very few

rearing coho within Wasilla Creek. We feel very strongly that many of those fish spawned in Wasilla Creek move out of the system and into the Spring Creek/Wasilla Creek wetlands complex.

The ADF&G and USF&WS recognize the need for additional surveys within the proposed highway expansion location to better define fish utilization of the stream channels and wetlands that will possibly be eliminated by highway construction. Our agencies will endeavor to acquire additional trap data in this area during the 1988 field season. We will coordinate our field efforts with your office so that the Alaska Department of Transportation and Public Facilities may participate in these surveys if you so desire.

Sincerely,

Gary Liepitz
Habitat Biologist
Alaska Department of Fish and Game

Gary Stackhouse
Fisheries Biologist
U.S. Fish and Wildlife Service

Attachments

SUMMARY OF TRAP DATA - ALL THREE STUDIES

Trap No.	No. of Coho Juvenile	Soak Time (hrs.)	Catch Rate
1	0	21.0	0
2	36	21.0	1.7
3	0	21.0	0
4	0	21.0	0
5	1	21.0	0
6	0	1.3	0
7	21	3.2	6.6
8	0	1.2	0
9	0	1.4	0
10	59	7.9	7.5
11	9	7.2	1.3
12	33	7.0	4.7
13	41	6.5	6.3
14	43	6.8	6.3
15	13	7.6	1.7
16	13	8.1	1.6
17	3	7.8	.4
18	0	1.7	0
19	1	2.3	.4
20	0	2.2	0
21	29	1.3	22.3
22	9	1.4	6.4
23	1	1.4	.7
24	6	1.4	4.3
25	21	3.2	6.6
26	0	4.7	0
27	43	5	8.6
28	72	5	14.4
29	88	5	17.6
30	44	5	8.8
31	7	5	1.4
32	18	5	3.6
33	0	5	0
34	0	5	0
35	3	5	.6
36	0	5	0
37	2	5	.4
38	9	5	1.8
39	0	5	0
40	8	5	1.6
41	23	5	4.6
42	31	5	6.2

M E M O R A N D U M S t a t e o f A l a s k a

TO: Tom Kron
Chief of Operations
ADFG-FRED Div.
Juneau-HQ

DATE: 26-Oct-87

PHONE: 892-6816

FROM: Bob Chlupach
Area Biologist
ADFG-FRED Div.
Big Lake

SUBJECT: Spring Creek
Spawning Channels

Attached is a copy of a local map. Highlighted is Spring Creek. Without getting into a whole dissertation I'll encapsulate the key items.

My telephone communications have been with Stan Pleninger, an Anchorage attorney. I keep a long distance telephone log and could if necessary document communication throughout the summer.

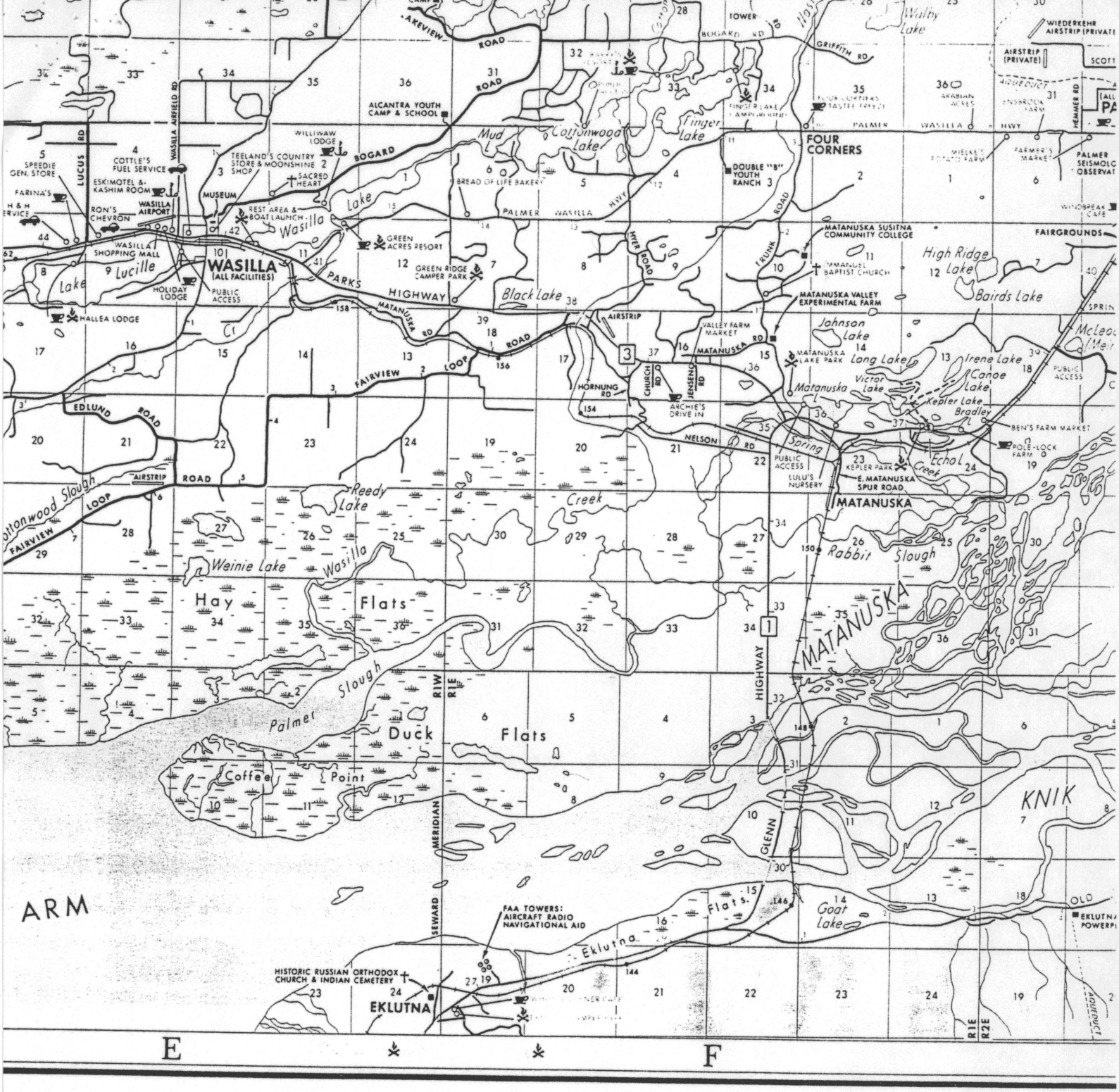
Stan Pleninger's main interest is to fill in an area of wetlands on his property and develop the site to make money, i.e. grocery store, tourist information center, etc. As you can tell he holds a key section of property as it lies at the intersection of the Glenn and Parks Highway. As a periphery comeon, he wants an attraction to his property. I led him through the permitting scenarios of both Habitat and the Corps of Engineers. I discussed the coho sport fishery in the immediate area and also enhancement strategies for Knik Arm coho which included Spring Creek. I presented several ideas which included but were not restricted to; viewing areas constructed on pilings, the strategies behind spawning channel development, types of enhancement geared to respective salmon species, bird viewing (shorebirds, ducks, etc.) basically pointing out how important wetlands are to recharging a drainage but also how it affects surrounding wildlife. I became an impromptu "naturalist".

I made myself available virtually at any time for an on site meeting which constituted many of my calls to Stan. The on site meeting was to be a site walk through with discussion of ideas relating to existing wildlife and how it could be used to attract people to his location. I've been to this site on numerous occassions observing surrounding conditions because there is on the drawing board plans to widen and expand the number of highway lanes from Eklutna to this intersection. I've also performed juvenile coho population estimations for the area. This was all done to help in the mitigation process of highway construction surrounding this particular spot. Habitat Division has kept me informed as to the construction timetable and as items of interest come up.

I had 200+ lbs. of adult chinook and coho heads collected for CWT extraction to ship to the lab and some hatchery errands in Anchorage so I decided to kill several birds with one stone. I arranged to meet with Stan Pleninger and his landscape artist in Anchorage last Monday, October 19. At that meeting I essentially became an impromtu naturalist. We had several quality aerial photographs which aided our discussion. Pretty much everything I've mentioned above was discussed and expanded upon.

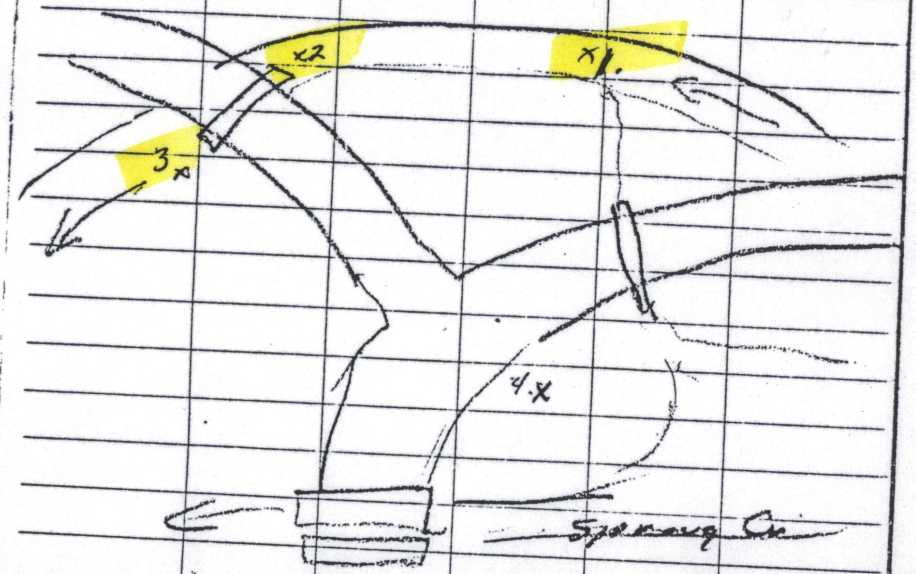
Since this site is already a possible mitigation site due to highway construction I informed him I would continue to work that aspect. Regardless of what Pleninger does at Spring Creek, this site in particular is scheduled for coho smolt release next year. I will continue to keep in touch with Habitat about the highway timetable. If it stymies we'll have our proposals in place and we can proceed but in turn we do have to be careful because we do not want to initiate and construct anything that the construction will wipe out. Therein lies the main reason to keep in touch with Habitat.

cc:Brian Allee-HQ Juno
Tim McDaniel-Reg Anch
Bill Hauser-Reg Anch
Gary Liepitz-Habitat Anch


WASILLA
(ALL FACILITIES)
MATANUSKA
FOUR CORNERS
PALMER
WASILLA
EKLUTNA
ALCANTRA YOUTH CAMP & SCHOOL
WILLIWAW LODGE
TEELAND'S COUNTRY STORE & MOONSHINE SHOP
SACRED HEART
COTTLE'S FUEL SERVICE
ESKIMOTEL & KASHIM ROOM
SPEEDIE GEN. STORE
FARINA'S
RON'S CHEVRON
WASILLA AIRPORT
WASILLA SHOPPING MALL
HOLIDAY LODGE
MUSEUM
REST AREA & BOAT LAUNCH
GREEN ACRES RESORT
GREEN RIDGE CAMPER PARK
HALLEA LODGE
PUBLIC ACCESS
BREAD OF LIFE BAKERY
DOUBLE "B" YOUTH RANCH
MATANUSKA SUSITNA COMMUNITY COLLEGE
EMMANUEL BAPTIST CHURCH
MATANUSKA VALLEY EXPERIMENTAL FARM
VALLEY FARM MARKET
MATANUSKA LAKE PARK
ARCHIE'S DRIVE IN
LULU'S NURSERY
KEPLER PARK
E. MATANUSKA SPUR ROAD
BEN'S FARM MARKET
POLE-LOCK FARM
FAA TOWERS: AIRCRAFT RADIO NAVIGATIONAL AID
HISTORIC RUSSIAN ORTHODOX CHURCH & INDIAN CEMETERY
Lucille Lake
Black Lake
Mud Lake
Cottonwood Lake
Finger Lake
Wasilla Lake
Reedy Lake
Weinie Lake
Wasilla Creek
Matanuska Creek
Spring Creek
Echo Creek
Johnson Lake
Long Lake
Victor Lake
Kepler Lake
Bradley Lake
Irene Lake
Canoe Lake
High Ridge Lake
Bairds Lake
Wolfy Lake
Hay Flats
Palmer Slough
Duck Flats
Coffee Point
Rabbit Slough
Goat Lake
Eklutna Flats
Eklutna
Cottonwood Slough
KNIK
MATANUSKA
ARM
PARKS HIGHWAY
GLENN HIGHWAY
SEWARD MERIDIAN
R1W
R1E
R2E
BOGARD ROAD
PALMER WASILLA HWY
AKEVIEW ROAD
WASILLA AIRFIELD RD
LUCUS RD
EDLUND ROAD
AIRSTRIP ROAD
FAIRVIEW LOOP
MATANUSKA RD
HORNUNG RD
CHURCH RD
JENSEN RD
NELSON RD
HYER ROAD
TRUNK ROAD
GRIFFITH RD
FAIRGROUNDS
WIEDERKEHR AIRSTRIP (PRIVATE)
AIRSTRIP (PRIVATE)
E
F

7-12-86

Fish Trap Survey
Spring Creek



Trap #	Coho	Steelhead	Time
1	6 juv	13	6 hrs
2	26 juv	0	7 hrs
3	12 juv	6	7 hrs
4	58 juv	10	24 hrs

MEMORANDUM

State of Alaska

TO: AL CARSON
HABITAT BIO III
ADFG - HAB. DIV.
ANCH.

DATE: 9/5/85

FILE NO:

TELEPHONE NO: 892-6816

FROM: BOB CHLUPACH
FISH BIO III
ADFG - FRED DIV.
BIG LAKE

Bob Chlupach

SUBJECT: SPRING CREEK JUVENILE COHO POPULATION ESTIMATION

To make the population estimation we used 15 standard minnow traps, painted green, with plastic bait containers. Containers were the size used for most prescription drugs. Holes were melted melted in containers w/ a soldering gun. For bait we used processed salmon eggs. Traps were soaked between 4-5 hours each sampling period. Past experience indicates if traps are soaked approximately 24 hours, fish will swim out of trap. Attached is a map showing the area trapped.

Marking was accomplished after anesthetizing fish w/ MS 222. To mark captured fish we elected to clip the tip of the caudal fin w/ a fine tipped surgical scissors.

No doubt regeneration will occur quickly but is assumed not to during our two ~~to~~ week period. Recovery from anesthesia was done by placing fish in a bucket containing stream water. No mortalities were observed. I also assumed due to time of year; that there was minor movement to and from the sampling site, no loss or very few morts due to marking, and both marked and unmarked fish had the same susceptability to capture.

There are several estimators to use; Peterson Schnabel, Schumacher - Eschmeyer Chapman to list the most popular. I selected the Schnabel which is;

Al Carson
Dave Jessel

$$P = \frac{\Sigma m(u+r)}{\Sigma r}$$

m = number of marks
u = unmarked fish
r = recaptured fish
Σ = summation

I determined the estimate and used 95% confidence limits to determine the upper and lower bounds. For the estimate on 8/28/85; $\Sigma m = 846$ marked fish on 8/14 & 8/22
$u = 414$ captured on 8/28
$r = 70$ recaptured on 8/28

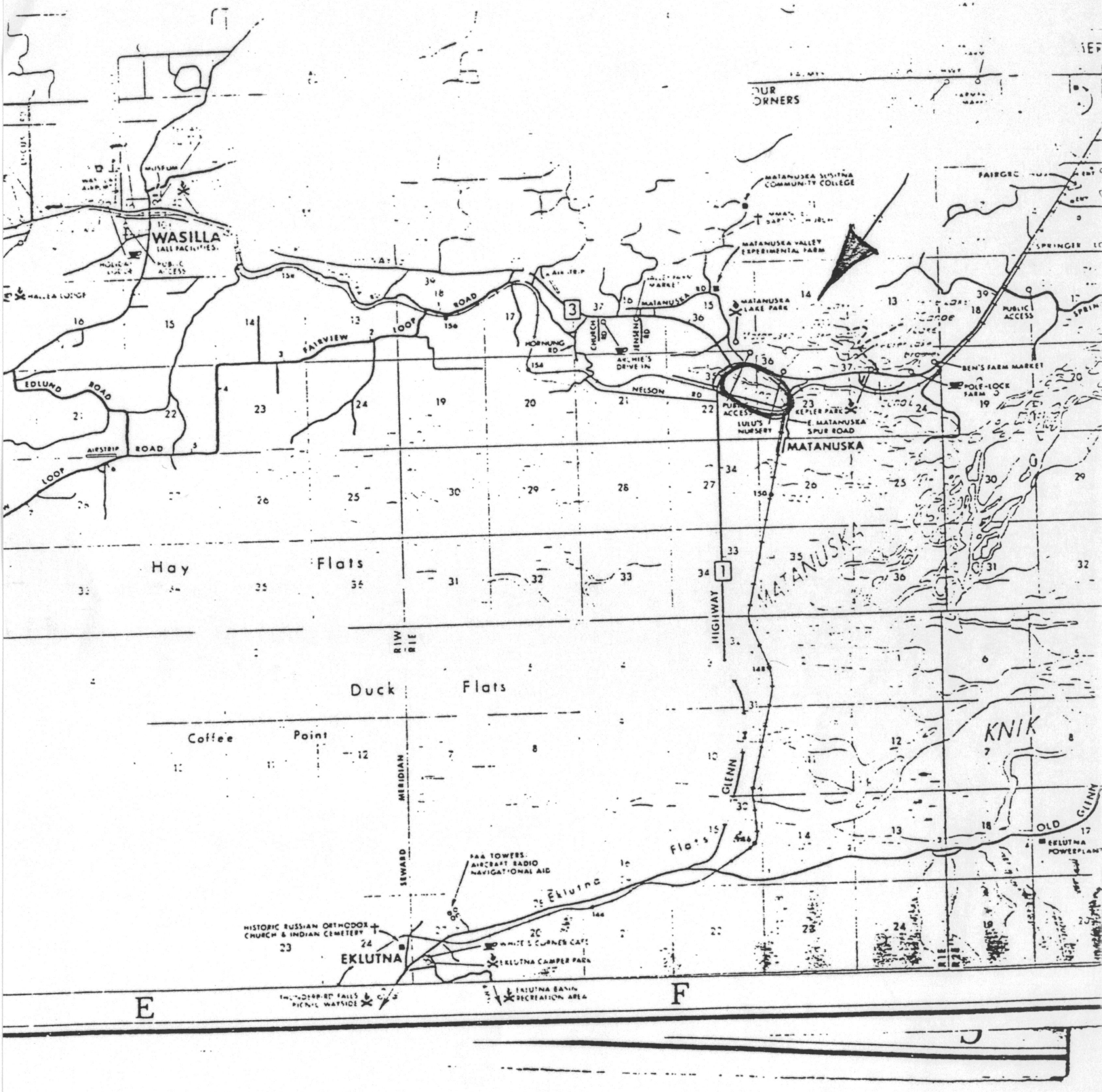
$$P = \frac{846(414+70)}{70} = 5849$$

The formula for the confidence limits is: $1.92 + r \pm 1.96\sqrt{r+1}$. This value is substituted for r in the Schnabel to attain the upper and lower estimates at the 95% confidence level. The upper and lower r value is determined from:
$1.92 + 70 \pm 1.96\sqrt{70+1}$.

The point estimate is: 5,849
The upper estimate: 7,214
The lower estimate: 4,826

Also, there was no change in water flow during our sample per
If you have any questions or need some further assistance,
give me a call.

Copies to: BILL HAUSER - FRED Anch.
LARRY ENGEL - SF Palmer


WASILLA
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PUBLIC ACCESS
HOLLY LAKE LODGE
EDLUND ROAD
AIRSTRIP ROAD
LOOP
FAIRVIEW LOOP
ROAD
HORNUNG RD
CHURCH RD
JENSEN RD
ARCHIE'S DRIVE IN
NELSON RD
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MATANUSKA LAKE PARK
MATANUSKA VALLEY EXPERIMENTAL FARM
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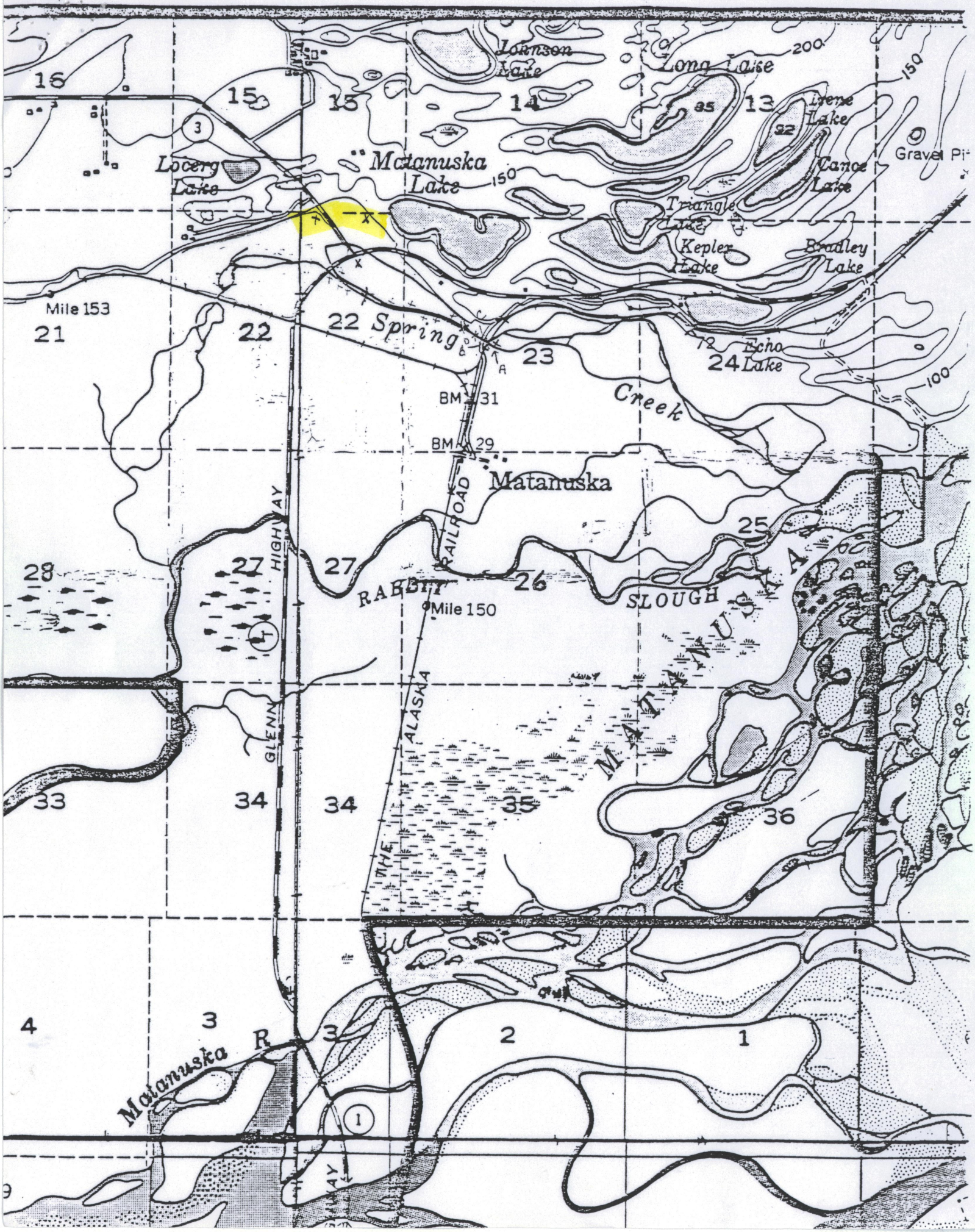
Coffee Point
SEWARD MERIDIAN
GLENN
OLD GLENN
KNIK
EKLUTNA POWERPLANT
FAA TOWERS AIRCRAFT RADIO NAVIGATIONAL AID
HISTORIC RUSSIAN ORTHODOX CHURCH & INDIAN CEMETERY
EKLUTNA
WHITE'S CORNER CAFE
EKLUTNA CAMPER PARK
EKLUTNA BASIN RECREATION AREA
PICNIC WAYSIDE
E
F


Larrson Lake
Long Lake
200
150
Irene Lake
Gravel Pit
Canoe Lake
Triangle Lake
Kepler Lake
Bradley Lake
Echo Lake
Locey Lake
Matanuska Lake
Mile 153
Spring Creek
BM 31
BM 29
Matanuska
RAILROAD
GLENN HIGHWAY
RABBIT SLOUGH
Mile 150
ALASKA
MATANUSKA
Matanuska R
16
15
14
13
21
22
23
24
25
26
27
28
33
34
35
36
4
3
2
1

Anadromous Streams via Ed Weiss scn2000 Draft

Anadromous Streams via HDR Heads-up Digitizing

0 500 1000 1500 Feet

0 100 200 300 400 Meters

ANADROMOUS STREAMS

GLENN - PARKS INTERCHANGE
ENVIRONMENTAL REEVALUATION
NH-I-0A1-5(1)

FIGURE
1

DATE: 5/03 | DATA SOURCE: ADF&G ('00), HDR ('01)

Add streams 247-50-10260-2019-3030 & 3032 w/ CO_R
Fix Hydro on 2019 & 3020 & 4008. Arch #4387 #4388
Shorten 4008
Delete 5009 & 6008

Matanuska

X
O
N
A
V
B
D
S
C
R
E
Q
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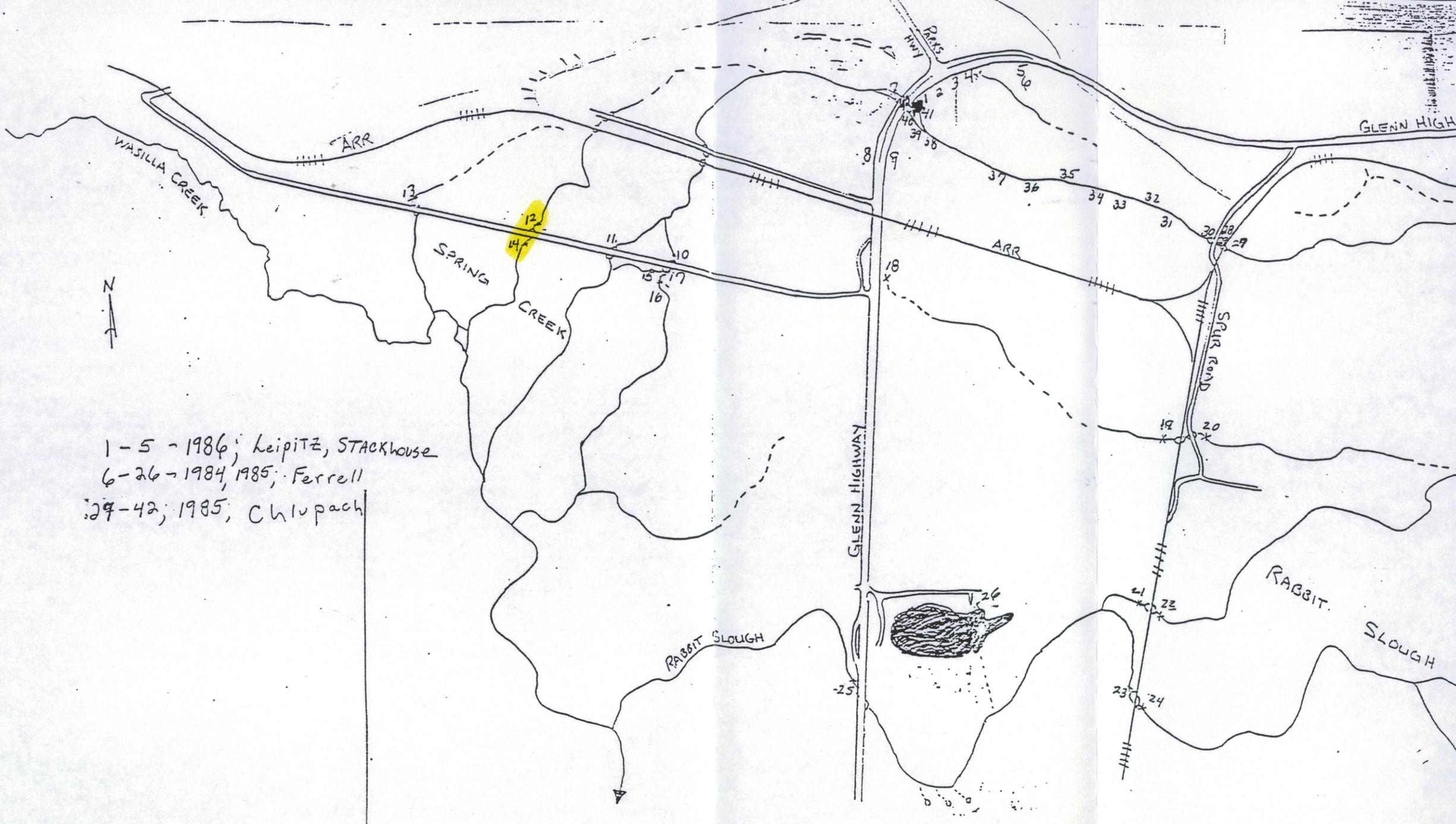
J
K
L
AA
Z
H
I

2019
3032
3030
3020
4008
5009
6008
Liepitz 6/18 CO_R
CO_R

Station	SITE	Survey Date	Species	FLIFESTAG	FISHCOUN	Station Comments
991008J	00010	10/7/99	coho salmon	~~JOA~~ JUV	4	Nelson Rd, 3rd culvert(western most), .9 mile to gate,outlet pool,3.5' deep.
991008J	00010	10/7/99	Alaska blackfish	JOA	7	Nelson Rd, 3rd culvert(western most), .9 mile to gate,outlet pool,3.5' deep.
991008K	00011	10/8/99	stickleback, undifferentiated	JOA	1	Nelson Rd, west site, 15' downstream of culvert,3'depth.Substrate probably influenced by road. Wetland channel
991008K	00011	10/8/99	Alaska blackfish	JOA	5	Nelson Rd, west site, 15' downstream of culvert,3'depth.Substrate probably influenced by road. Wetland channel
991008K	00011	10/8/99	coho salmon	JUV	1	Nelson Rd, west site, 15' downstream of culvert,3'depth.Substrate probably influenced by road. Wetland channel
991118K	00011	11/18/99	Alaska blackfish	JOA	6	Nelson Rd, west site, 15' downstream of culvert,3'depthice-.5',2.7' deep.Substrate probably influenced by road. wetlan
991206K	00011	12/6/99	Alaska blackfish	JOA	2	Nelson Rd, west site, 15' downstream of culvert,3'depth. Wetland channel
K	00011	1/18/00	no fish collected or observed	NAP		Nelson Rd, west site, 15' downstream of culvert, ice 2', 3.5'depth. Wetland channel
K	00011	2/10/00	no fish collected or observed	NAP		Nelson Rd, west site. 1.7' ice, 3.2' to bottom. Wetland channel
K	00011	3/13/00	Alaska blackfish	JOA	7	
991011N	00014	10/11/99	Alaska blackfish	JOA	1	Upper spring
991011O	00015	10/11/99	Alaska blackfish	JOA	8	Wetland-lower spring area NE Parks/Glenn Hwy junction
991011O	00015	10/11/99	coho salmon	~~NAP~~ JUV	11	Wetland-lower spring area NE Parks/Glenn Hwy junction
991118O	00015	11/18/99	Alaska blackfish	JOA	5	Wetland-lower spring area NE Parks/Glenn Hwy junction.Open water set,1.5' deep.Alder/grass tussocks.
991118O	00015	11/18/99	coho salmon	JUV	29	Wetland-lower spring area NE Parks/Glenn Hwy junction.Open water set,1.5' deep.Alder/grass tussocks.
991206O	00015	12/6/99	Alaska blackfish	JOA	29	Wetland-lower spring area NE Parks/Glenn Hwy junction
991206O	00015	12/6/99	coho salmon	JUV	34	Wetland-lower spring area NE Parks/Glenn Hwy junction
O	00015	1/18/00	Alaska blackfish	JOA	2	Wetland-lower spring area NE Parks/Glenn Hwy junction. 3" ice,1.5' deep
O	00015	1/18/00	coho salmon	JUV	66	Wetland-lower spring area NE Parks/Glenn Hwy junction. 3" ice,1.5' deep
O	00015	2/10/00	coho salmon	JUV	38	Wetland-lower spring area NE Parks/Glenn Hwy junction. 3" ice, 1.5' deep
O	00015	3/13/00	coho salmon	JUV	31	
991118Xa	00027	11/18/99	no fish collected or observed	NAP		101 yds W Parks Hwy ramp,70 yds S hay flats bluff.8" ice,2.6' deep.Wetland channel/pool.emergent vegetation prese

← ICE →



1-5-1986; Leipitz, STACKhouse
6-26-1984, 1985; Ferrell
27-42; 1985; Chlupach